

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
20 October 2005 (20.10.2005)

PCT

(10) International Publication Number
WO 2005/099063 A1

(51) International Patent Classification⁷: **H02J 3/18**

(21) International Application Number:
PCT/EP2004/002588

(22) International Filing Date: 12 March 2004 (12.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **GENERAL ELECTRIC COMPANY** [US/US]; 1 River Road, Schenectady, NY 12345 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BARTON, Werner** [DE/DE]; Westfalenring 8, 48712 Gescher (DE). **BÜCKER, Andreas** [DE/DE]; Luehrmannweg 17a, 49205 Hasbergen (DE).

(74) Agents: **HILLERINGMANN, Jochen** et al.; Bahnhofsvorplatz 1 (deichmannhaus), 50667 Cologne (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

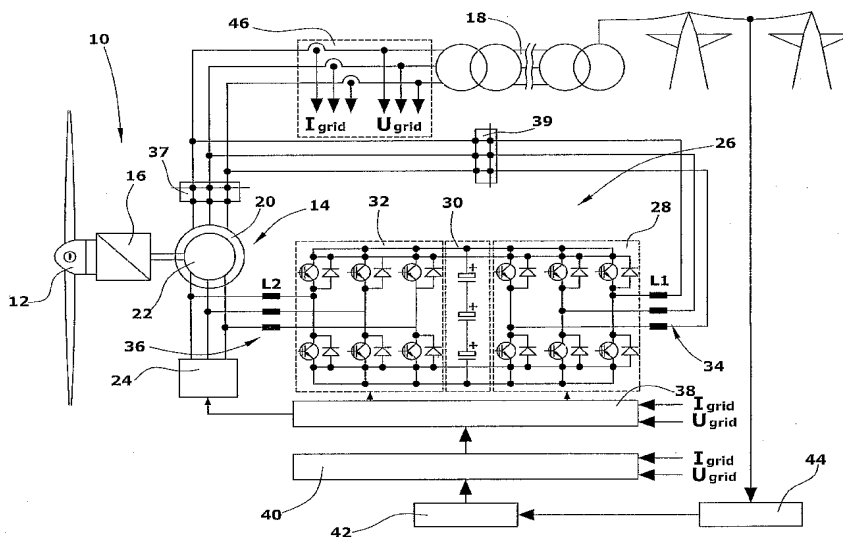
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR OPERATING A FREQUENCY CONVERTER OF A GENERATOR AND WIND ENERGY TURBINE HAVING A GENERATOR OPERATED ACCORDING TO THE METHOD



(57) Abstract: The method for operating a frequency converter (26) of a generator (14) in particular of a wind energy turbine (10), in the event of a substantial grid voltage drop, wherein the frequency converter (26) comprises a generator-side power converter (32), to be connected to the generator (14), a grid-side power converter (28) to be connected to the voltage grid (18), and a DC link circuit (30) for connecting the generator-side power converter (32) to the grid-side power converter (28), comprises the step of generating the amount of reactive current to be supplied to the grid (18) by controlling the frequency converter (26).

WO 2005/099063 A1